

DRAG REDUCTION USING FATTY ACIDS

Abstract of the Disclosure

Non-polymeric fatty acid drag reducing agents are described herein. These additives are useful to reduce drag in hydrocarbon fluids and multiphase fluids of hydrocarbon(s) and water. No injection probes or other special equipment is expected to be required to introduce the drag reducing agent into the liquid stream, nor is grinding (cryogenic or otherwise) of the additive necessary to form a suitable drag reducing agent. The drag reducing additives of the invention are not subject to shear degradation and do not cause undesirable changes in the emulsion or fluid quality of the fluid being treated, or undesirable foaming. The drag reducing additives include fatty acids, alkoxylated derivatives of fatty acids, organic and inorganic salts of fatty acids and alkoxylated derivatives thereof, and esters of fatty acids and alkoxylated derivatives thereof, and mixtures thereof.